**Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1-55 (canceled)

56. (New) A recombinant virus of the Paramyxoviridae family comprising a nonparamyxoviral envelope protein capable of mediating entry of said recombinant virus into a mammalian cell.

57. (New) The recombinant virus of claim 56, wherein the recombinant virus is a recombinant respiratory syncytial virus, and the nonparamyxoviral envelope protein comprises an ectodomain of a baculovirus envelope GP64 protein.

58. (New) The recombinant virus of claim 57, wherein the nonparamyxoviral envelope protein comprises (1) an ectodomain and a transmembrane domain of the baculovirus GP64 protein and a C-terminal sequence of a respiratory syncytial virus fusion protein F, or (2) the baculovirus GP64 protein.

59. (New) The recombinant virus of claim 57, wherein the baculovirus GP64 protein is an AcMNPV GP64 protein.

60. (New) The recombinant virus of claim 58, wherein the baculovirus GP64 protein is an AcMNPV GP64 protein.

61. (New) A pharmaceutical composition comprising a therapeutically effective amount of the recombinant virus of claim 56, wherein said pharmaceutical composition has been stored at above about 0°C for at least 3.5 days.

62. (New) A pharmaceutical composition comprising a therapeutically effective amount of the recombinant virus of claim 56, wherein said pharmaceutical composition has been stored at room temperature for at least 3.5 days.

63. (New) A pharmaceutical composition comprising a therapeutically effective amount of the recombinant virus of claim 56, wherein said pharmaceutical composition has been stored at above 0°C for at least one week.

64. (New) A pharmaceutical composition comprising a therapeutically effective amount of the recombinant virus of claim 56, wherein said pharmaceutical composition has been stored at room temperature for at least one week.

65. (New) A composition comprising the recombinant virus of claim 56, wherein the composition has been stored under storage conditions for at least 3.5 days, wherein infectivity of said recombinant virus at the end of said at least 3.5 days is at least 60% of that at the beginning of said at least 3.5 days, and wherein said storage conditions are such that the average infectivity of wild-type human respiratory syncytial virus A2 strain is reduced by more than 40% after said at least 3.5 days under said storage conditions.

66. (New) A composition comprising a recombinant virus of claim 56, wherein the composition has been stored under storage conditions for at least one week, wherein infectivity of said recombinant virus at the end of said at least one week is at least 60% of that at the beginning of said at least one week, and wherein said storage conditions are such that the average infectivity of wild-type human respiratory syncytial virus A2 strain is reduced by more than 50% after said at least one week under said storage conditions.

67. (New) A composition comprising a recombinant virus of claim 56, wherein the composition has been stored under storage conditions for at least two weeks, and infectivity of said recombinant virus at the end of said at least two weeks is at least 60% of that at the beginning of said at least two weeks, and wherein said storage conditions are such that the average infectivity of wild-type human respiratory syncytial virus A2 strain is reduced by more than 80% after said at least two weeks under said storage conditions.

68. (New) The composition of claim 65, wherein said storage conditions include maintaining storage temperature or temperatures at above 0°C cumulatively for at least two weeks.

69. (New) The composition of claim 65, wherein said storage conditions include maintaining storage temperature or temperatures at room temperature cumulatively for at least two weeks.

70. (New) The recombinant virus of claim 56, wherein said recombinant virus comprises or encodes at least one immunogenic epitope of a mammalian pathogen.

71. (New) A vaccine formulation comprising the recombinant virus of claim 70, wherein the vaccine formulation is capable of eliciting an immune response against the pathogen or a component thereof in a mammal.

72. (New) Use of the recombinant virus of claim 70 for the manufacture of a medication for eliciting said immune response in a mammal of interest.

73. (New) The recombinant virus of claim 56, comprising or encoding immunogenic epitopes of two or more different mammalian pathogens, each of said mammalian pathogens capable of causing a different respective mammal disease or medical syndrome.

74. (New) The recombinant virus of claim 56, wherein said recombinant virus is capable of infecting a cell in a mammal but cannot transmit from said cell to another cell in the mammal.

75. (New) The recombinant virus of claim 56, wherein said recombinant virus does not include any functional respiratory syncytial virus fusion protein F that can mediate entry of said recombinant virus into the mammalian cell.

76. (New) The recombinant virus of claim 56, wherein said recombinant virus comprises a recombinant respiratory syncytial virus fusion protein F which includes a heterologous cytoplasmic tail or transmembrane domain.

77. (New) A method of detecting a molecule or antibody in a biological sample comprising:

contacting said biological sample with the recombinant virus of claim 70, and detecting the presence or absence of a molecule or an antibody in said biological sample, wherein said molecule or antibody is capable of binding to said epitope.

78. (New) A polynucleotide encoding each and every protein component of a recombinant virus of claim 56.

79. (New) A mammalian cell comprising a recombinant virus of claim 56, or one or more polynucleotides that encode each and every protein component of said recombinant virus.

80. (New) A non-human mammal comprising the mammalian cell of claim 79.

81. (New) A therapeutic vector comprising or encoding a recombinant virus of claim 56.

82. (New) An enveloped recombinant vertebrate virus comprising a heterologous envelope protein, wherein said envelope protein is capable of mediating entry of the recombinant virus into a mammalian cell, wherein the recombinant virus has been stored under storage conditions for at least 3.5 days, wherein infectivity of the recombinant virus at the end of said at least 3.5 days is at least 60% of that at the beginning of said at least 3.5 days, and wherein said storage conditions are such that the average infectivity of a wild-type virus of the same species as the recombinant virus is reduced by more than 40% after said at least 3.5 days under said storage conditions.

83. (New) The recombinant virus of claim 82, wherein said storage conditions include maintaining storage temperature or temperatures at above 0°C cumulatively for at least 3.5 days.

84. (New) The recombinant virus of claim 82, wherein said storage conditions include maintaining storage temperature or temperatures at room temperature cumulatively for at least 3.5 days.

85. (New) The recombinant virus of claim 82, wherein said envelope protein includes an ectodomain of a baculovirus transmembrane protein, and said recombinant virus is a recombinant respiratory syncytial virus, and wherein said wild-type virus is wild-type human respiratory syncytial virus A2 strain.

86. (New) The recombinant virus of claims 82, wherein the recombinant virus has been stored under said storage conditions for at least two weeks, wherein infectivity of the recombinant virus at the end of said at least two weeks is at least 60% of that at the beginning of said at least two weeks, and wherein said storage conditions are such that the average infectivity of a wild-type virus of the same species as the recombinant virus is reduced by more than 80% after said at least two weeks under said storage conditions.

87. (New) An enveloped recombinant vertebrate virus comprising a heterologous envelope protein, wherein said envelope protein includes an ectodomain of a baculovirus transmembrane protein and is capable of mediating entry of the recombinant virus into a mammalian cell, and wherein the recombinant virus is not a lentivirus.

88. (New) The recombinant virus according to claim 87, wherein the recombinant virus is prepared by culturing mammalian cells infected with the recombinant virus at about 33°C and then recovering the recombinant virus from said cells.

89. (New) The recombinant virus according to claim 87, wherein the recombinant virus has improved infectivity to the mammalian cell at 33°C as compared to at 37°C.

90. (New) A mammalian cell comprising: an expression cassette encoding an envelope protein comprising an ectodomain of a baculovirus transmembrane protein; and one or more expression vectors comprising or encoding the genome of an infection- defective or infection-attenuated mammalian virus, wherein said mammalian virus after being assembled in said mammalian cell comprises said envelope protein which provides the assembled virus with improved infectivity.

91. (New) The mammalian cell of claim 90, wherein said mammalian virus is a recombinant respiratory syncytial virus, and said envelope protein comprises an ectodomain of a baculovirus envelope GP64 protein.

92. (New) The mammalian cell of claim 91, wherein said recombinant respiratory syncytial virus lacks one or more endogenous RSV transmembrane proteins.

93. (New) The mammalian cell of claim 92, wherein each of said one or more endogenous RSV transmembrane proteins is selected from the group consisting of SH protein, G protein, and F protein.

94. (New) The mammalian cell of claim 91, wherein said recombinant respiratory syncytial virus comprises a recombinant respiratory syncytial virus fusion protein F which includes a heterologous cytoplasmic tail or transmembrane domain.

95. (New) The mammalian cell of claim 91, wherein said recombinant respiratory syncytial virus comprises a recombinant respiratory syncytial virus fusion protein F which includes a heterologous cytoplasmic tail, a heterologous transmembrane domain, and an ectodomain comprising a N-terminal homologous sequence and a C-terminal heterologous sequence.

96. (New) The mammalian cell of claim 91, wherein said recombinant respiratory syncytial virus comprises a recombinant respiratory syncytial virus fusion protein F lacking a homologous cytoplasmic tail or transmembrane domain.

97. (New) The mammalian cell of claim 90, wherein said expression cassette is stably integrated into a chromosome of said mammalian cell.

98. (New) The mammalian cell of claim 97, wherein said cell is a Vero cell.

99. (New) A mammalian cell comprising a stably-introduced expression cassette that encodes an envelope protein comprising an ectodomain of a baculovirus transmembrane protein.

100. (New) The mammalian cell of claim 99, wherein said baculovirus transmembrane protein is baculovirus envelope GP64 protein.

101. (New) The mammalian cell of claim 100, wherein said mammalian cell is a Vero cell, and said expression cassette is integrated into a chromosome of said Vero cell.

102. (New) A pharmaceutical composition comprising a therapeutically effective amount of a recombinant virus of claim 56, wherein said pharmaceutical composition has been stored at about 22°C for at least 3.5 days.

103. (New) A pharmaceutical composition comprising a therapeutically effective amount of a recombinant virus of claim 56, wherein said pharmaceutical composition has been stored at about 22°C for at least one week.

104. (New) The recombinant virus according to claim 70, wherein said storage conditions include maintaining storage temperature or temperatures at about 22°C cumulatively for at least 3.5 days.

105. (New) The recombinant virus according to claim 70, wherein said storage conditions include maintaining storage temperature or temperatures at about 22°C cumulatively for at least one week.